



Tropical Storm HERMINE QuickLook Posted: 06:00 EDT 09/02/2016

NOAA and NOAA Partnership Stations Relative to the Storm 09/05/16 2 AM 09/04/16 2 AM 09/03/16 2 PM 09/03/162AD Springmaid Pier, SC Panama City Beach, FL 09/02/16 2 PM Apalachicola, FL Charleston, SC Pensacola, FL Fort Pulaski, GA 09/02/16 5 AM Dauphin Is., AL Fernandina Beach, FL 1-295 Bridge, St Johns River Cedar Key, FL Clearwater Beach, FL Old Port Tampa, FL St. Petersburg, FL Fort Myers, FL Active Stations 1:10,000,000 Extent TS Force Wind

Storm Analysis

As of 9/02/2016 06:00 EDT, water levels remain elevated along the Gulf Coast from Florida to Mississippi. However, water level residuals (observed minus tide predictions) are beginning to decrease following landfall of Hermine. At Cedar Key, FL, water levels are still measuring over 4 feet above tide predictions, while areas south from Tampa Bay to Fort Myers have water levels measuring 2-3 feet above normal tide levels. West of landfall, from Apalachicola, FL to Dauphin Island, AL, water levels remain 1.5 to 2.0 feet above tidal predictions. Along the

southeast U.S. coast, water levels are rising within the St. Johns River at the I-295 Bridge, but observed water levels are no more than 1 foot above tide predictions from St. Johns River, FL to Springmaid Pier, SC.

Overall, the peak observed water level during Hermine based on preliminary observations was 6.10 feet above Mean Higher High Water at Cedar Key, FL, which if verified would be a record water level for the station.

Winds from Cedar Key to Tampa Bay, FL range from 15 to 30 knots with some gusts over 45 knots. Winds are increasing at Fernandina Beach, FL and Fort Pulaski, GA and now range between 15 and 25 kts with higher gusts. Barometric pressure is beginning to rise along the Gulf Coast.

Water Level and Meteorological plots available below are updated automatically. A line denoting <u>Mean Higher High Water</u> (MHHW) is displayed to provide an approximate indication of when flooding inundation may occur.

For additional data, please see the <u>Center for Operational Oceanographic Products & Services</u> website. For more information or archived products and reports, please see the <u>Storm QuickLook</u> Homepage.

Analyst: F	PFF
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SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION: TROPICAL STORM HERMINE ADVISORY NUMBER 20
NWS NATIONAL HURRICANE CENTER MIAMI FL
500 AM EDT FRI SEP 02 2016

...HERMINE WEAKENING WHILE MOVING FARTHER INLAND...
...LIFE-THREATENING SURGE AND FLOODING RAINS CONTINUE...

SUMMARY OF 500 AM EDT...0900 UTC...INFORMATION

LOCATION...30.8N 83.6W
ABOUT 50 MI...80 KM NE OF TALLAHASSEE FLORIDA
ABOUT 20 MI...30 KM W OF VALDOSTA GEORGIA
MAXIMUM SUSTAINED WINDS...70 MPH...110 KM/H
PRESENT MOVEMENT...NNE OR 25 DEGREES AT 14 MPH...22 KM/H
MINIMUM CENTRAL PRESSURE...988 MB...29.18 INCHES

WATCHES AND WARNINGS

CHANGES WITH THIS ADVISORY:

The Hurricane Warning and the Hurricane Watch have been discontinued. The Tropical Storm Warning has been discontinued westof Indian Pass.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Tropical Storm Warning is in effect for...

- * Englewood to Indian Pass
- * Flagler/Volusia County line to Duck
- * Pamlico and Albemarle Sounds

A Tropical Storm Watch is in effect for...

- * North of Duck to Sandy Hook
- * Chesapeake Bay from Smith Point southward
- * Southern Delaware Bay

Interests elsewhere along the United States northeast coast shouldmonitor the progress of this system.

For storm information specific to your area, including possibleinland watches and warnings, please monitor products issued by yourlocal National Weather Service forecast office.

DISCUSSION AND 48-HOUR OUTLOOK

At 500 AM EDT (0900 UTC), the center of Tropical Storm Hermine waslocated inland near latitude 30.8 North, longitude 83.6 West. Hermine is moving toward the north-northeast near 14 mph (22 km/h) and this motion is expected to continue today and Saturday. On theforecast track, the center of Hermine should continue to movefarther inland across southeastern Georgia today and into the Carolinas tonight and Saturday.

Maximum sustained winds have decreased to near 70 mph (110 km/h) with higher gusts. Additional weakening is forecast while Herminemoves farther inland.

Tropical-storm-force winds extend outward up to 175 miles (280 km) from the center. Valdosta, Georgia recently reported a wind gust of 53 mph (85 km/h).

The estimated minimum central pressure is 988 mb (29.18 inches).

HAZARDS AFFECTING LAND

WIND: Tropical storm conditions are expected to begin within thewarning area along the Atlantic coast later today, and spreadnorthward through the weekend. Wind in the tropical storm warningarea along the Gulf coast of Florida should gradually diminishtoday.

STORM SURGE: The combination of a dangerous storm surge and thetide will continue to cause normally dry areas near the coast to beflooded by rising waters moving inland from the shoreline. There is a danger of life-threatening inundation within the next 12 to 24hours along the Gulf coast of Florida from Indian Pass to LongboatKey. For a depiction of areas at risk, please see the PrototypeNational Weather Service Storm Surge Watch/Warning Graphic. Personslocated within these areas should take all necessary actions toprotect life and property from rising water. Promptly follow anyinstructions, including evacuation orders, from local officials.

The water could reach the following heights above ground if thepeak surge occurs at the time of high tide...

Destin to Indian Pass...1 to 3 feet
Indian Pass to Ochlockonee River...4 to 7 feet
Ochlockonee River to Yankeetown...6 to 9 feet
Yankeetown to Aripeka...4 to 7 feet
Aripeka to Longboat Key...including Tampa Bay...2 to 4 feet
Longboat Key to Bonita Beach...1 to 3 feet
Florida-Georgia line to Tidewater of Virginia...1 to 3 feet

The Prototype National Weather Service Storm Surge Watch/WarningGraphic is a depiction of areas that would qualify for inclusionunder a storm surge watch or warning currently under development bythe National Weather Service and planned for operational use in 2017. This prototype graphic is available

atwww.hurricanes.gov/graphics_at4.shtml?wsurge

RAINFALL: Hermine is expected to produce storm total rainfallaccumulations of 5 to 10 inches over the southeastern United Statesfrom northwest Florida through southern and eastern Georgia intoSouth Carolina and eastern North Carolina, with possible isolatedmaximum amounts of 15 inches. These rains may cause life-threateningfloods and flash floods. Heavy rain could reach the coastal Mid-Atlantic states from Virginia to New Jersey beginning earlySaturday.

TORNADOES: A few tornadoes are possible this morning acrossnorthern Florida and southern Georgia. The tornado risk will spreadacross the eastern Carolinas later today.

NEXT ADVISORY

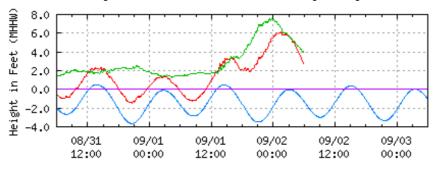
Next intermediate advisory at 800 AM EDT. Next complete advisory at 1100 AM EDT.

Forecaster Avila

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: Cedar Key - Water Level, Cedar Key - Winds, Cedar Key - Barometric, Clearwater Beach - Water Level, Clearwater Beach - Winds, Clearwater Beach - Barometric, St Petersburg, Tampa Bay - Water Level, St Petersburg, Tampa Bay - Water Level, St Petersburg, Tampa Bay - Water Level, Old Port Tampa - Winds, Fort Myers - Water Level, Fort Myers - Winds, Apalachicola - Water Level, Apalachicola - Winds, Panama City Beach - Water Level, Pensacola - Winds, Pensacola - Water Level, Pensacola - Winds, Pensacola - Barometric, Dauphin Island - Water Level, Dauphin Island - Winds, I-295 Bridge, St Johns River - Water Level, I-295 Bridge, St Johns River - Winds, Fernandina Beach - Water Level, Fort Pulaski - Water Level, Fort Pulaski - Water Level, Fort Pulaski - Winds, Charleston - Water Level, Charleston - Winds, Springmaid Pier - Water Level, Springmaid Pier - Water Level, Springmaid Pier - Winds

NOAA/NOS/CO-OPS 8727520 Cedar Key, FL Preliminary Water Level, relative to Mean Higher High Water(MHHW)

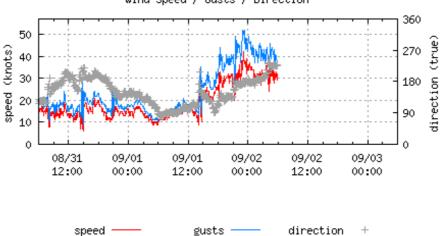


Predicted Tide —— (Obs-Pred) —— Observed WL —— MHHW ——

Last Observed Sample: 09/02/2016 06:00 (EDT). Data relative to MHHW Observed: 2.70 ft. Predicted: -1.32 ft. Residual: 4.02 ft. Historical Maximum Water Level: Oct 7 1996, 5.15 ft.

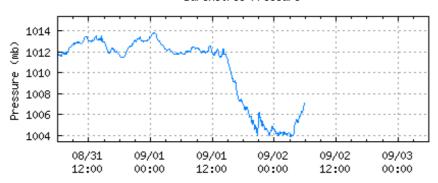
Next High Tide: 09/02/2016 15:06 (EDT), 0.38 ft.

NOAA/NOS/CO-OPS <u>8727520 Cedar Key, FL</u> Wind Speed / Gusts / Direction



Last Observed Sample: 09/02/2016 06:00 (EDT) Wind Speed: 30 knots Gusts: 39 knots Direction: 227° T

NOAA/NOS/CO-OPS <u>8727520 Cedar Key, FL</u> Barometric Pressure



barometric pressure ——
Last Observed Sample: 09/02/2016 06:00 (EDT)
Barometric Pressure: 1007.3 mb

NOAA/NOS/CO-OPS 8726724 Clearwater Beach, FL Preliminary Water Level, relative to Mean Higher High Water(MHHW) Height in Feet (MHHW) 5.0 4.0 3.0 2.0 1.0 0.0 -1.0 -2.0 -3.0 08/31 09/01 09/01 09/02 09/02 09/03 12:00 00:00 12:00 00:00 12:00 00:00

Last Observed Sample: 09/02/2016 05:48 (EDT). Data relative to MHHW Observed: 0.63 ft. Predicted: -1.85 ft. Residual: 2.48 ft. Historical Maximum Water Level: Mar 13 1993, 4.00 ft. Next High Tide: 09/02/2016 12:48 (EDT), 0.31 ft.

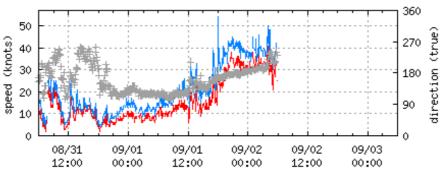
(Obs-Pred)

MHHW

Predicted Tide

Observed WL

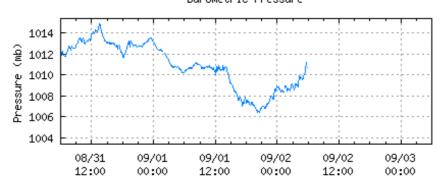
NOAA/NOS/CO-OPS <u>8726724 Clearwater Beach, FL</u> Wind Speed / Gusts / Direction



speed — gusts — direction +

Last Observed Sample: 09/02/2016 05:48 (EDT) Wind Speed: 25 knots Gusts: 33 knots Direction: 231° T

NOAA/NOS/CO-OPS <u>8726724 Clearwater Beach, FL</u> Barometric Pressure

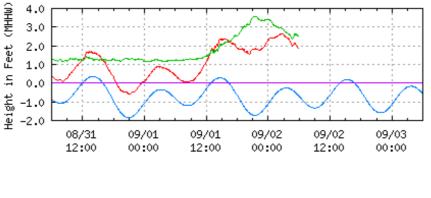


barometric pressure ----

Last Observed Sample: 09/02/2016 05:48 (EDT)

Barometric Pressure: 1010.7 mb

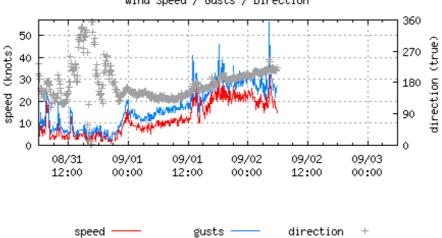
NOAA/NOS/CO-OPS <u>8726520 St Petersburg, Tampa Bay, FL</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide (Obs-Pred) (Obs-Pred) (MHHW (

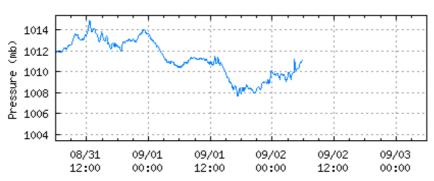
Last Observed Sample: 09/02/2016 05:54 (EDT). Data relative to MHHW Observed: 1.88 ft. Predicted: -0.68 ft. Residual: 2.56 ft. Historical Maximum Water Level: Aug 31 1985, 4.00 ft. Next High Tide: 09/02/2016 15:19 (EDT), 0.20 ft.

NOAA/NOS/CO-OPS $\underline{8726520~St~Petersburg,~Tampa~Bay,~FL}$ Wind Speed / Gusts / Direction



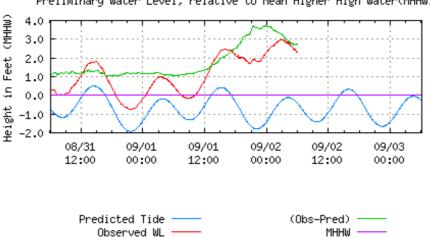
Last Observed Sample: 09/02/2016 05:54 (EDT) Wind Speed: 17 knots Gusts: 21 knots Direction: 218° T

NOAA/NOS/CO-OPS <u>8726520 St Petersburg, Tampa Bay, FL</u> Barometric Pressure

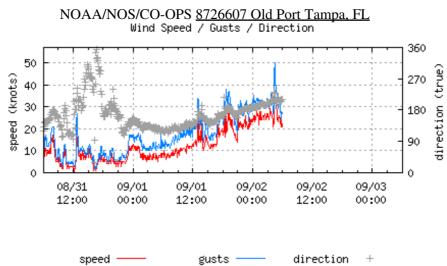


barometric pressure ——
Last Observed Sample: 09/02/2016 05:54 (EDT)
Barometric Pressure: 1011.0 mb

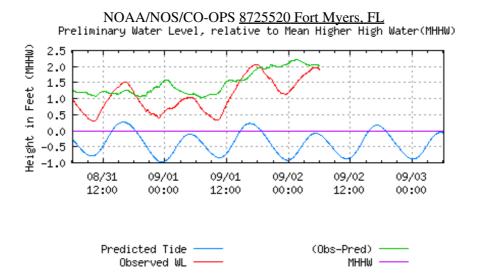
NOAA/NOS/CO-OPS <u>8726607 Old Port Tampa</u>, FL Preliminary Water Level, relative to Mean Higher High Water(MHHW)



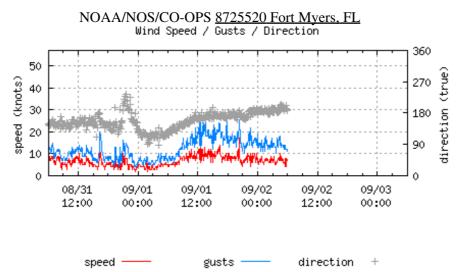
Last Observed Sample: 09/02/2016 05:54 (EDT). Data relative to MHHW Observed: 2.31 ft. Predicted: -0.41 ft. Residual: 2.72 ft. Historical Maximum Water Level: Oct 8 1996, 3.60 ft. Next High Tide: 09/02/2016 15:54 (EDT), 0.32 ft.



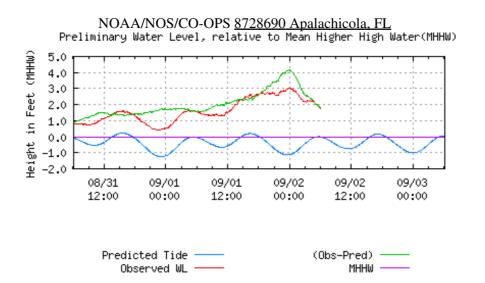
Last Observed Sample: 09/02/2016 05:54 (EDT) Wind Speed: 21 knots Gusts: 27 knots Direction: 211° T



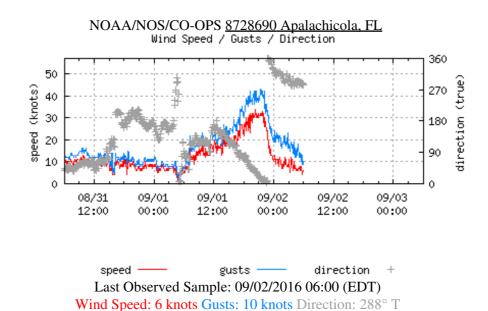
Last Observed Sample: 09/02/2016 06:00 (EDT). Data relative to MHHW Observed: 1.89 ft. Predicted: -0.12 ft. Residual: 2.01 ft. Historical Maximum Water Level: Nov 23 1988, 3.41 ft. Next High Tide: 09/02/2016 17:07 (EDT), 0.17 ft.

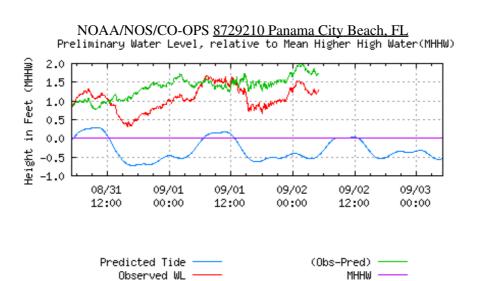


Last Observed Sample: 09/02/2016 06:00 (EDT) Wind Speed: 7 knots Gusts: 12 knots Direction: 189° T



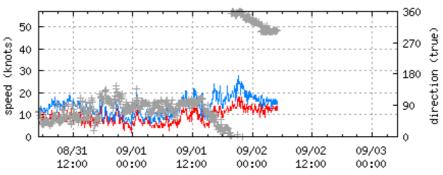
Last Observed Sample: 09/02/2016 06:00 (EDT). Data relative to MHHW Observed: 1.78 ft. Predicted: -0.01 ft. Residual: 1.79 ft. Historical Maximum Water Level: Jul 10 2005, 6.43 ft. Next High Tide: 09/02/2016 17:08 (EDT), 0.16 ft.





Last Observed Sample: 09/02/2016 05:00 (CDT). Data relative to MHHW Observed: 1.28 ft. Predicted: -0.46 ft. Residual: 1.74 ft. Historical Maximum Water Level: Oct 4 1995, 6.84 ft. Next High Tide: 09/02/2016 11:46 (CDT), 0.03 ft.

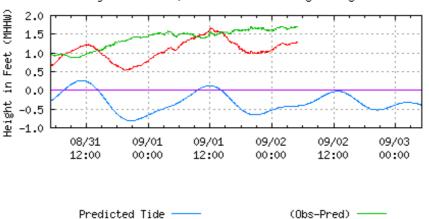
NOAA/NOS/CO-OPS <u>8729210 Panama City Beach, FL</u> Wind Speed / Gusts / Direction



speed gusts direction + Last Observed Sample: 09/02/2016 05:00 (CDT)

Wind Speed: 14 knots Gusts: 16 knots Direction: 303° T

NOAA/NOS/CO-OPS <u>8729840 Pensacola, FL</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)

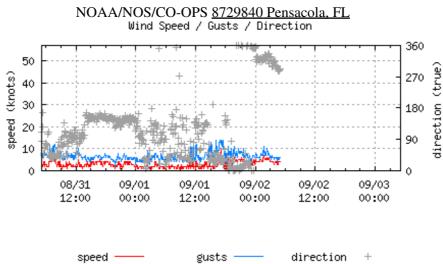


Last Observed Sample: 09/02/2016 04:54 (CDT). Data relative to MHHW Observed: 1.29 ft. Predicted: -0.42 ft. Residual: 1.71 ft.

MHHW

Observed WL

Historical Maximum Water Level: Sep 18 1926, 7.41 ft. Next High Tide: 09/02/2016 12:46 (CDT), -0.02 ft.



Last Observed Sample: 09/02/2016 04:54 (CDT) Wind Speed: 4 knots Gusts: 6 knots Direction: 293° T

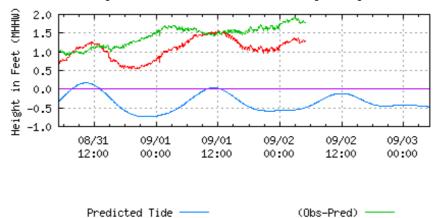
NOAA/NOS/CO-OPS 8729840 Pensacola, FL Barometric Pressure 1014 Pressure (mb) 1012 1010 1008 1006 1004 08/31 09/01 09/01 09/02 09/02 09/03 12:00 00:00 12:00 00:00 12:00 00:00

Last Observed Sample: 09/02/2016 04:54 (CDT)

Barometric Pressure: 1009.3 mb

barometric pressure

$NOAA/NOS/CO-OPS ~\underbrace{8735180~Dauphin~Island,~AL}_{Preliminary~Water~Level,~relative~to~Mean~Higher~High~Water(MHHW)}$



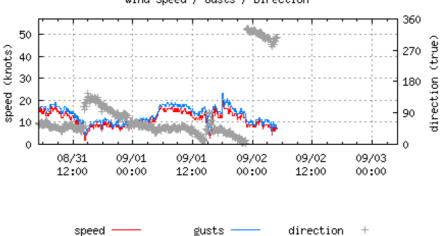
Last Observed Sample: 09/02/2016 04:54 (CDT). Data relative to MHHW Observed: 1.30 ft. Predicted: -0.49 ft. Residual: 1.79 ft.

MHHW

Observed WL

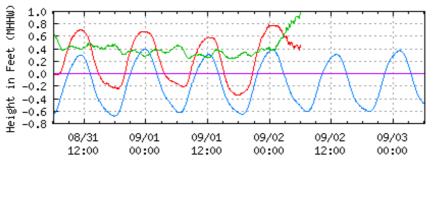
Historical Maximum Water Level: Sep 16 2004, 5.94 ft. Next High Tide: 09/02/2016 11:58 (CDT), -0.11 ft.

NOAA/NOS/CO-OPS <u>8735180 Dauphin Island</u>, <u>AL</u> Wind Speed / Gusts / Direction



Last Observed Sample: 09/02/2016 04:54 (CDT) Wind Speed: 7 knots Gusts: 7 knots Direction: 307° T

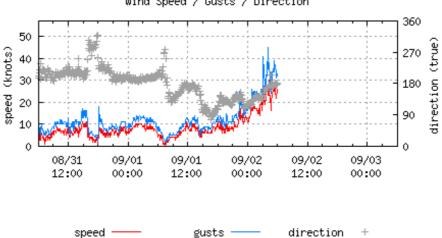
NOAA/NOS/CO-OPS <u>8720357 I-295 Bridge</u>, <u>St Johns River</u>, <u>FL</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide (Obs-Pred) (Obs-Pred) MHHW (Obs-Pred)

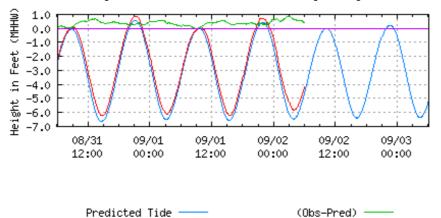
Last Observed Sample: 09/02/2016 06:00 (EDT). Data relative to MHHW Observed: 0.45 ft. Predicted: -0.53 ft. Residual: 0.98 ft. Historical Maximum Water Level: Sep 27 2004, 3.46 ft. Next High Tide: 09/02/2016 12:57 (EDT), 0.31 ft.

NOAA/NOS/CO-OPS <u>8720357 I-295 Bridge</u>, <u>St Johns River</u>, <u>FL</u> Wind Speed / Gusts / Direction



Last Observed Sample: 09/02/2016 06:00 (EDT) Wind Speed: 24 knots Gusts: 32 knots Direction: 182° T

NOAA/NOS/CO-OPS <u>8720030 Fernandina Beach, FL</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)



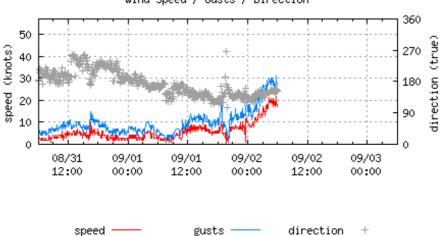
Last Observed Sample: 09/02/2016 06:00 (EDT). Data relative to MHHW Observed: -4.17 ft. Predicted: -4.60 ft. Residual: 0.43 ft.

MHHW

Observed WL

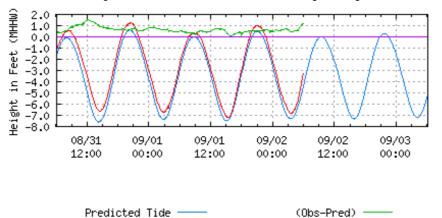
Historical Maximum Water Level: Oct 2 1898, 6.94 ft. Next High Tide: 09/02/2016 10:17 (EDT), 0.01 ft.

NOAA/NOS/CO-OPS <u>8720030 Fernandina Beach, FL</u> Wind Speed / Gusts / Direction



Last Observed Sample: 09/02/2016 06:00 (EDT) Wind Speed: 18 knots Gusts: 27 knots Direction: 152° T

NOAA/NOS/CO-OPS <u>8670870 Fort Pulaski, GA</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)



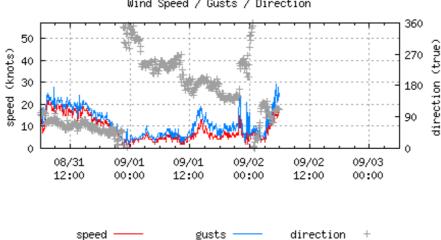
Last Observed Sample: 09/02/2016 05:54 (EDT). Data relative to MHHW Observed: -3.31 ft. Predicted: -4.51 ft. Residual: 1.20 ft.

MHHW

Observed WL

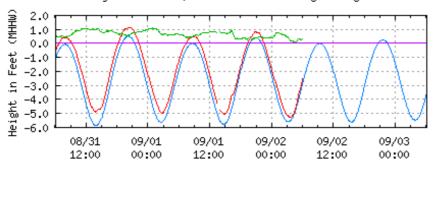
Historical Maximum Water Level: Oct 15 1947, 3.40 ft. Next High Tide: 09/02/2016 09:27 (EDT), 0.00 ft.

NOAA/NOS/CO-OPS 8670870 Fort Pulaski, GA Wind Speed / Gusts / Direction



Last Observed Sample: 09/02/2016 05:54 (EDT) Wind Speed: 19 knots Gusts: 25 knots Direction: 111° T

NOAA/NOS/CO-OPS <u>8665530 Charleston, SC</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)

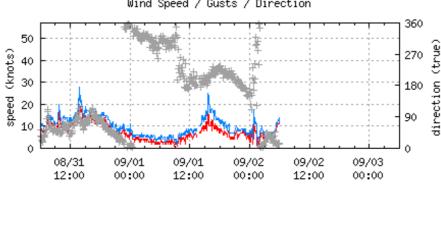


Predicted Tide (Obs-Pred) (Obs-Pred) MHHW

Last Observed Sample: 09/02/2016 06:00 (EDT). Data relative to MHHW Observed: -2.54 ft. Predicted: -2.87 ft. Residual: 0.33 ft. Historical Maximum Water Level: Sep 21 1989, 6.76 ft.

Next High Tide: 09/02/2016 09:22 (EDT), 0.01 ft.

NOAA/NOS/CO-OPS <u>8665530 Charleston</u>, <u>SC</u> Wind Speed / <u>Gusts</u> / <u>Direction</u>



Last Observed Sample: 09/02/2016 06:00 (EDT)

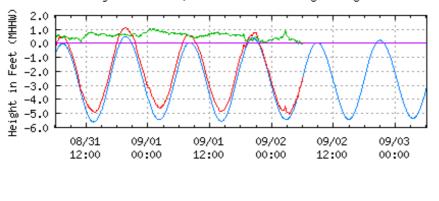
gusts

direction

speed

Wind Speed: 12 knots Gusts: 14 knots Direction: 16° T

NOAA/NOS/CO-OPS <u>8661070 Springmaid Pier, SC</u> Preliminary Water Level, relative to Mean Higher High Water(MHHW)

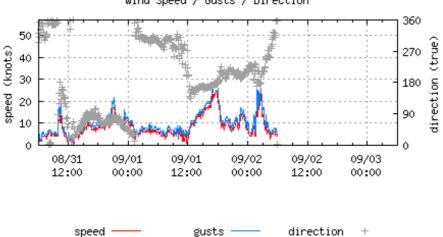


Predicted Tide (Obs-Pred) — Observed WL MHHW —

Last Observed Sample: 09/02/2016 06:00 (EDT). Data relative to MHHW Observed: -2.43 ft. Predicted: -2.49 ft. Residual: 0.06 ft.

Historical Maximum Water Level: Jan 1 1987, 3.65 ft. Next High Tide: 09/02/2016 08:52 (EDT), 0.07 ft.

NOAA/NOS/CO-OPS <u>8661070 Springmaid Pier, SC</u> Wind Speed / Gusts / Direction



Last Observed Sample: 09/02/2016 06:00 (EDT) Wind Speed: 4 knots Gusts: 6 knots Direction: 3° T

Latest Water Level Observations on MHHW

Station ID	Station Name	Date/Time	Observed Water Level	Predicted Tide	Residual Water Level	24 Hour Maximum Storm Tide
8727520	Cedar Key, FL	09/02/2016 06:00 (EDT)	2.70 ft	-1.32 ft	4.02 ft	6.10 ft
8726724	Clearwater Beach, FL	09/02/2016 05:48 (EDT)	0.63 ft	-1.85 ft	2.48 ft	3.00 ft
8726520	St Petersburg, Tampa Bay, FL	09/02/2016 05:54 (EDT)	1.88 ft	-0.68 ft	2.56 ft	2.64 ft
8726607	Old Port Tampa, FL	09/02/2016 05:54 (EDT)	2.31 ft	-0.41 ft	2.72 ft	2.98 ft
8725520	Fort Myers, FL	09/02/2016 06:00 (EDT)	1.89 ft	-0.12 ft	2.01 ft	2.06 ft
8728690	Apalachicola, FL	09/02/2016 06:00 (EDT)	1.78 ft	-0.01 ft	1.79 ft	3.04 ft
8729210	Panama City Beach, FL	09/02/2016 05:00 (CDT)	1.28 ft	-0.46 ft	1.74 ft	1.67 ft
8729840	Pensacola, FL	09/02/2016 04:54 (CDT)	1.29 ft	-0.42 ft	1.71 ft	1.68 ft
8735180	Dauphin Island, AL	09/02/2016 04:54 (CDT)	1.30 ft	-0.49 ft	1.79 ft	1.56 ft
8720357	I-295 Bridge, St Johns River, FL	09/02/2016 06:00 (EDT)	0.45 ft	-0.53 ft	0.98 ft	0.78 ft
8720030	Fernandina Beach, FL	09/02/2016 06:00 (EDT)	-4.17 ft	-4.60 ft	0.43 ft	0.73 ft
8670870	Fort Pulaski, GA	09/02/2016 05:54 (EDT)	-3.31 ft	-4.51 ft	1.20 ft	1.02 ft
8665530	Charleston, SC	09/02/2016 06:00 (EDT)	-2.54 ft	-2.87 ft	0.33 ft	0.85 ft
8661070	Springmaid Pier, SC	09/02/2016 06:00 (EDT)	-2.43 ft	-2.49 ft	0.06 ft	0.79 ft

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS) National Oceanic and Atmospheric Administration | U.S. Department of Commerce